

alic half, rapidly tapering toward the rounded tips, and not meeting at the mid-ventral suture. The wings are relatively smooth as compared with other areas.

All of the abdominal segments are finely punctate, and the anterior and posterior margins of the movable segments are set with a transverse row of minute, very short spicules.

Cremaster, bifurcate, slightly recurved ventrally, the tips not hooked. Spiracles concolorous with body, the centers slightly depressed.

Plate 17, figures B, C and D illustrate the ventral, lateral and dorsal aspects of the pupa.

## A NEW AND REMARKABLE KEYHOLE URCHIN, *MELLITA NOTABILIS* n. sp.

By HUBERT LYMAN CLARK

In a collection of shells and dry sea-urchin tests given to the Los Angeles Museum, there were two bare and bleached tests of *Mellita*, labeled "*Mellita longifissa*. Florida." It was obvious at a glance that the two were not conspecific and it was further evident that neither was *longifissa*. The smaller is undoubtedly a bare test of the common Florida species, *quinquiesperforata*, but the larger is certainly not that species nor closely allied to it. The extraordinarily small anterior petal, the great thickness of the specimen at its tip and the excessively long posterior unpaired lunule combine to give the upper surface of the specimen an appearance quite unlike any known *Mellita*, and when the lower surface is examined, the remarkable sculpturing about the lunules confirms the opinion that we have here a quite new species of the long-known genus *Mellita*. The following description of the bare test is adequate for characterizing the species, in spite of the absence of spines and pedicellariae.

Test rather heavy, 70 mm. long and 78 mm. wide; at the posterior margin it is less than a millimeter thick but at the tip of the anterior petal, the thickness of the test is 10 mm. The slope up from the anterior margin is rapid. Abactinal system, 30 mm. from that margin consists of a madreporite 7 mm. wide and 5 mm. long; the 4 genital pores at its lateral corners are small but distinct. Petaloid area 35 mm. long, 30 mm. wide across petals II and IV and 33 mm. across the tips of I and V; unpaired petal almost 14 mm. long and nearly 7 mm. wide; it is so narrow anteriorly as to be virtually pointed; petals II and IV, 13 mm. long and 8 wide, quite elliptical but tending to be widest distally; petals I and V,

markedly curved, the proximal end about 3 mm. wide, the distal, 9 or 10; the distal end abuts quite abruptly on the proximal end of the lunule. Interporiferous areas in all petals relatively narrow; in petal 3, widest at base, narrowest distally; in the other petals narrowest basally, widest at tip; none of the petals are closed at tip. Furrows forming the petals extremely narrow, the ridges between bearing a single series of 15-20 minute granules; pores present only at the inner end of each furrow—a rather striking feature but comparison with specimens of other *Mellitae* indicates it is due largely to the degree of weathering the bare test has undergone. Lunules I and V are about 18 mm. long by 1.5 wide, very definitely curved, the concave side towards the midline; lunules II and IV are 14 mm. long, nearly 2 wide and nearly straight; unpaired lunule 25 mm. long, very straight and narrow, little more than 1 mm. wide.

Lower surface remarkably modified by the irregular molding of the paired ambulacra and the margins of the unpaired lunule. Unpaired ambulacrum narrow; a small furrow runs forward from the very small mouth (1.5 mm. in diameter) for about 6 mm., then forks and the slightly diverging furrows extend almost to the margin, giving off one irregular branch on the outer side. Interambulacrum V, definitely outlined by the ambulacral furrows of I and V on each side, making a somewhat bell-shaped area surrounding the unpaired lunule. The four lateral ambulacra mark out irregular, conspicuous areas around the paired lunules, the margins of which are thickened and molded in a most unusual and striking way; the anterior pair are about 32 mm. long by 18-20 mm. wide, while the posterior pair are a trifle longer and narrower. Periproct very small, about 1 mm. in diameter and only 3 mm. back of mouth, in the anterior end of the long furrow. Color of test nearly white as a result of bleaching and weathering.

This is one of the best characterized species of *Mellita* that has yet been discovered and it is fully entitled to the name *notabilis*. The type is in the Los Angeles Museum, but there is no indication of the locality whence it came. The general appearance justifies the opinion that it is related most nearly to *longifissa* and probably comes from the western coast of Central America.